

# Reducing Barriers to Cycling in HRM

## Case Study of the Fairview Overpass

**Problem Overview:** The Fairview Overpass connects roadways in the urban street network: Bedford Highway to Joseph Howe Drive. Its design however, is that of a highway interchange, with on /off ramps and merge/ diverge lanes that allow for high speeds and volumes of traffic creating several "conflict areas" between motorists and cyclists. These create a barrier for all but the most advanced cyclists limiting connections from the Halifax peninsula, a major employment and service centre, to Clayton Park and Bedford, major residential growth areas.

**Potential Solutions:** Despite high speeds (60 km/hr is posted, but 80 km/hr is comfortably achieved by motorists), road widths throughout the overpass are actually quite generous. In many cases, wide curb lanes of up to 4.6m (15') in width (4.3m is considered adequate) exist, and in all cases, 4.4m wide curb lanes could be easily achieved with minor restriping. See Cross Sections a), b) and c) to the right.

Many of the potential solutions described below make use of the concept of "blue bike lanes" which employ coloured pavement markings through bicycle-motor vehicle conflict areas. These markings are intended to alert motorists to the legitimate presence of cyclists and to inform both parties of the correct way to share the roadway.

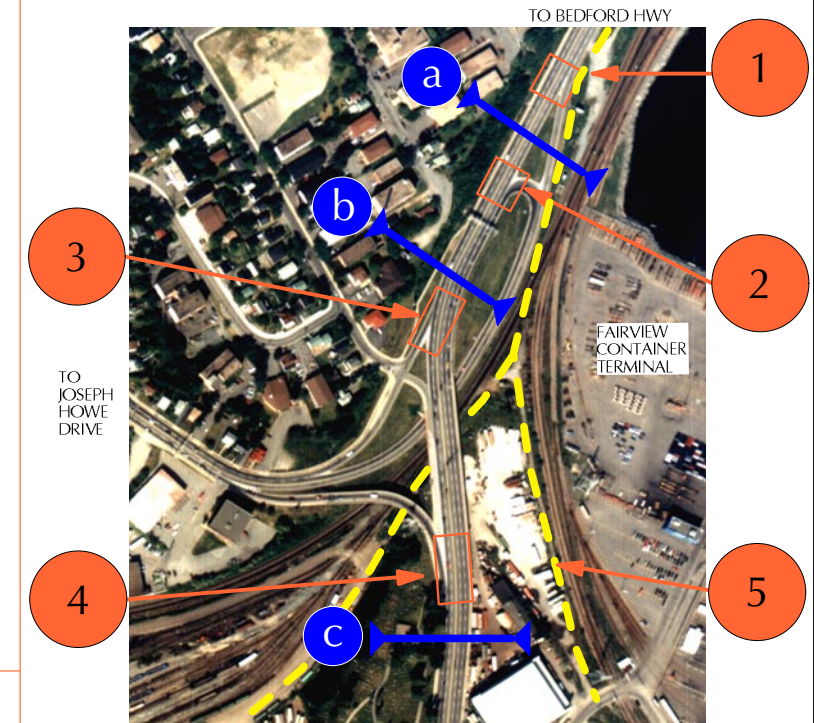
Although requirements can be easily met to achieve Wide Curb Lanes, the provision of

1.5m (5') bicycle lanes would not be possible without the elimination of a travel lane, or acceptance of substandard travel and /or bicycle lanes. A very long merge/ diverge lane exists in the northbound direction between Kempt Road and the Joseph Howe Drive off ramp. Traffic studies, beyond the scope of this project, would be required before considering the replacement of some of this space with bicycle lanes. Alternatively, 1.2m (4') bike lanes, combined with 3.3m (10' 10") travel lanes could be achieved. If at all possible, striped bike lanes through the entire overpass area would be highly desirable, even if they were of slightly substandard width.

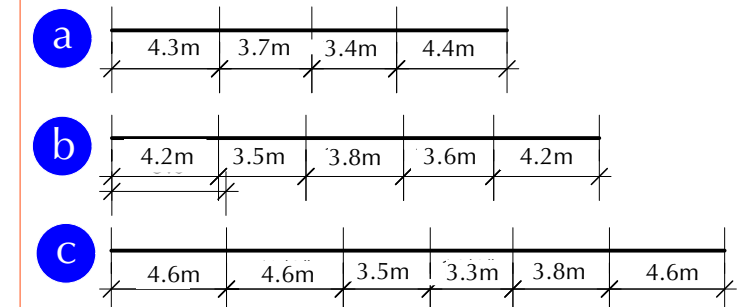
Also desirable, would be to bypass the overpass with a secondary route that would better serve less experienced cyclists. According to Principle 3 of the Bicycle Plan, secondary routes should be provided parallel to primary routes especially where the primary route may be difficult or intimidating for inexperienced cyclists. The presence of a secondary route however, must not preclude the improvement of the roadway.

In the long term, the municipality may give consideration to the replacement of merge/ diverge lanes with connections that are more sympathetic to the urban landscape. Uncontrolled ramp connections to urban roadways should generally be avoided where pedestrian and bicycle linkages are considered important. Until such time, the following potential solutions are presented for discussion:

### BLUEPRINT for a Bicycle Friendly HRM



**Key Map.** Fairview Overpass. Bedford Highway at Joseph Howe Drive



These cross sections of the existing roadway show that wide curb lanes already exist, or could be easily achieved with restriping, throughout the overpass. The provision of bike lanes would require the elimination of a travel lane or the acceptance of substandard width bicycle and/or travel lanes.

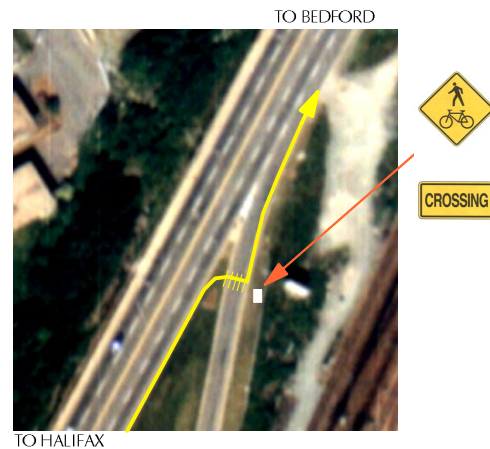
#### Problem Statement

Cyclist travels straight ahead and motorist crosses cyclist's path to merge onto road from ramp.

#### Potential Solution

Reduce the length of the conflict area by providing an opportunity for cyclists to cross merging traffic perpendicular to the roadway in order to return to the far right of the roadway beyond the merge.

Bicycle Crossing signage and pavement markings could be used to convey to motorists that they should stop and yield to crossing bicyclists, like they would to pedestrians at a crosswalk.



**1** On-Ramp from Joseph Howe Drive to Bedford Highway.

#### Problem Statement

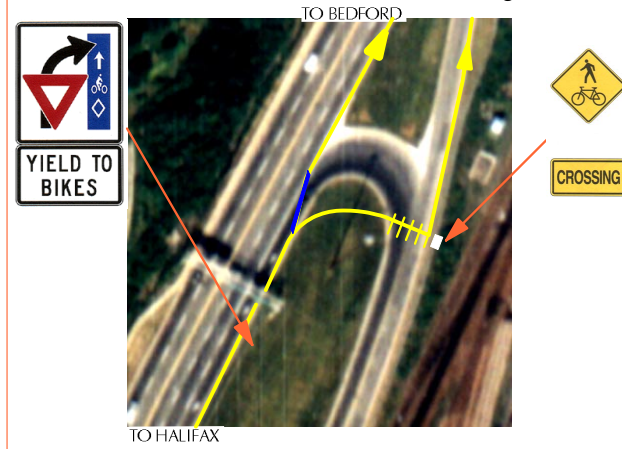
Cyclist travelling northbound along curb needs to cross the exclusive right turn lane in order to continue to proceed straight through.

#### Potential Solution A

Provide solid blue pavement markings through length of conflict area where cyclist is expected to ride. "Yield to Bikes" signage alerts motorists and reinforces the meaning of the pavement markings.

#### Potential Solution B

Reduce the length of the conflict area by diverting cyclists to a crossing point perpendicular to the on/ off ramp. Adequate sightlines for exiting vehicles would need to be confirmed. This solution eliminates the need for the crosswalk shown to the left in figure 1.



**2** Bedford Hwy Northbound Exiting to Joseph Howe Dr. on Exclusive Right Turn Lane

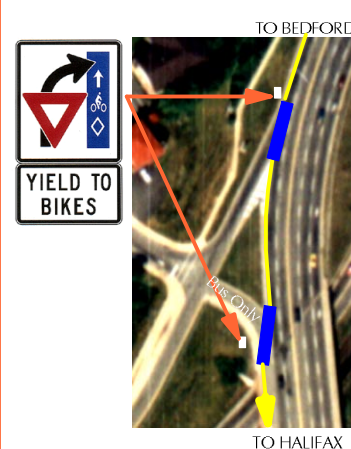
#### Problem Statement

Cyclist travelling straight ahead and motorist crosses path of cyclist to exit roadway.

#### Potential Solution

Provide solid blue pavement markings through length of conflict area where cyclist is expected to ride. "Yield to Bikes" signage alerts motorists and reinforces the meaning of the blue pavement markings.

The same treatment could be applied across the bus only merge lane if warranted.



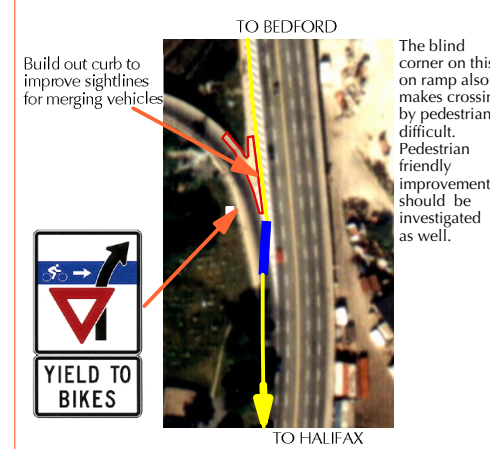
**3** Bedford Highway Southbound Exiting to Joseph Howe Drive

#### Problem Statement

Cyclist travelling straight ahead and motorist crosses bicycle's path to merge on to street from ramp. Poor visibility around curve.

#### Potential Solution

Build out curb to lengthen throat of on ramp as it approaches the roadway. This may improve sightlines and encourage motorists to delay merging until better visibility is achieved. Blue pavement markings throughout the area of conflict, with accompanying "Yield to Bikes" signage alerts motorists and reinforces the meaning of the blue pavement markings.



**4** On Ramp to Fairview Overpass from Joseph Howe Dr.

**5** **Secondary Route**  
It would be physically possible to build a path between the Bedford Highway and the railroad tracks from Bayview Road and branching to connect with both Chisholm Avenue or Seaview Park. A bridge would be required at one point to cross the railway tracks. Issues of access and ownership would need to be resolved as the path would require use of lands owned by CN and the Container Terminal. This option should be studied further.

**MINI STUDY A: FAIRVIEW OVERPASS**

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Sheet 1 of 1